

Supplemental Material:

	<i>C. jejuni</i>	<i>C. jejuni</i>	<i>C. coli</i>	<i>C. coli</i>	Standard ^a
antibiotic	S	R	S	R	
gentamicin	<=2	>=4	<=2	>=4	NARMS
telithromycin	<=4	>=8	<=4	>=8	NARMS
clindamycin	<=0.5	>=1	<=1	>=2	NARMS
azithromycin	<=0.25	>=0.5	<=0.5	>=1	NARMS
erythromycin	<=4	>=8	<=8	>=16	CLSI
chloramphenicol	<=16	>=32	<=16	>=32	NARMS
ciprofloxacin	<=0.5	>=1	<=0.5	>=1	CLSI
nalidixic acid	<=16	>=32	<=16	>=32	NARMS
doxycycline	<=0.5	>=1	<=1	>=2	NARMS
tetracycline	<=1	>=2	<=2	>=4	CLSI

Table S2: *Campylobacter* sp. breakpoints used in this study.

^aStandard refers to whether the breakpoint was established by CLSI or, if there is no CLSI breakpoint, by NARMS. Units are µg/ml.

antibiotic	S	I	R	Standard ^a
gentamicin	<= 4	8	>=16	CLSI
streptomycin	<=32	N/A	>=64	NARMS
amoxicillin-clavulanic acid	<=8/4	16/8	>=32/16	CLSI
cefoxitin	<=8	16	>=32	CLSI
ceftiofur	<=2	4	>=8	CLSI
ceftriaxone	<=1	2	>=4	CLSI
sulfamethoxazole/sulfisoxazole	<=256	N/A	>=512	CLSI
co-trimoxazole	<=2/38	N/A	>=4/76	CLSI
azithromycin	<=16	N/A	>=32	NARMS
ampicillin	<=8	16	>=32	CLSI
chloramphenicol	<=8	16	>=32	CLSI ^b
ciprofloxacin	<=0.06	0.12-0.5	>=1	CLSI ^c
nalidixic acid	<=16	N/A	>=32	CLSI
tetracycline	<= 4	8	>=16	CLSI
amikacin	<=16	32	>=64	CLSI

Table S3: *E. coli* and *S. enterica* breakpoints.

^aStandard refers to whether the breakpoint was established by CLSI or, if there is no CLSI breakpoint, by NARMS. Units are µg/ml.

^bFor *E. coli* isolates, the NARMS convention of using *Salmonella* breakpoints was followed.

^cFor *S. enterica*, isolates were scored as resistant to ciprofloxacin if they were intermediately susceptible ("I").

Gene as determined by AMRFinder	Predicted antibiotic resistance
<i>aac(3)</i>	gentamicin
<i>aac(3)-I</i>	gentamicin
<i>aac(3)-Id</i>	gentamicin
<i>aac(3)-II</i>	gentamicin
<i>aac(3)-IId</i>	gentamicin
<i>aac(3)-IV</i>	gentamicin
<i>aac(3)-VIa</i>	gentamicin
<i>aac(6')-Ib</i>	amikacin
<i>aac(6')-Ib4</i>	gentamicin
<i>aac(6')-Ie</i>	amikacin, gentamicin
<i>aac(6')-IIC</i>	gentamicin
<i>aadA</i>	streptomycin
<i>aadA1</i>	streptomycin
<i>aadA12</i>	streptomycin
<i>aadA13</i>	streptomycin
<i>aadA15</i>	streptomycin
<i>aadA2</i>	streptomycin
<i>aadA21</i>	streptomycin
<i>aadA22</i>	streptomycin
<i>aadA25</i>	streptomycin
<i>aadA29</i>	streptomycin
<i>aadA4</i>	streptomycin
<i>aadA5</i>	streptomycin
<i>aadA6</i>	streptomycin
<i>aadA7</i>	streptomycin
<i>aadA8</i>	streptomycin
<i>aadE</i>	streptomycin

<i>abc-f</i>	azithromycin
<i>ampC</i>	amoxicillin-clavulanic acid, ampicillin
<i>ant(2")-Ia</i>	gentamicin, kanamycin
<i>ant(3")</i>	streptomycin
<i>ant(6)</i>	streptomycin
<i>ant(6)-Ia</i>	streptomycin
<i>aph(2")-Ig</i>	amikacin, gentamicin
<i>aph(2")-IIIa</i>	amikacin, gentamicin
<i>aph(3")</i>	streptomycin
<i>aph(3")-Ib</i>	streptomycin
<i>aph(3')-I</i>	kanamycin
<i>aph(3')-Ia</i>	kanamycin
<i>aph(3')-Id</i>	kanamycin
<i>aph(3')-II</i>	kanamycin
<i>aph(3')-IIa</i>	kanamycin
<i>aph(3')-IIIa</i>	amikacin, kanamycin
<i>aph(3')-VIIa</i>	kanamycin
<i>aph(6)-I</i>	streptomycin
<i>aph(6)-Ic</i>	streptomycin
<i>aph(6)-Id</i>	streptomycin
<i>arma</i>	amikacin, gentamicin
<i>bla_{CARB-2}</i>	ampicillin
<i>bla_{CMY}</i>	amoxicillin-clavulanic acid, ampicillin, cefoxitin, ceftiofur, ceftriaxone
<i>bla_{CMY-2}</i>	amoxicillin-clavulanic acid, ampicillin, cefoxitin, ceftiofur, ceftriaxone

<i>bla</i> _{CMY-5}	amoxicillin-clavulanic acid, ampicillin, cefoxitin, ceftiofur, ceftriaxone
<i>bla</i> _{CMY-6I}	amoxicillin-clavulanic acid, ampicillin, cefoxitin, ceftiofur, ceftriaxone
<i>bla</i> _{CMY-7}	amoxicillin-clavulanic acid, ampicillin, cefoxitin, ceftiofur, ceftriaxone
<i>bla</i> _{CTX-M}	ampicillin, ceftriaxone
<i>bla</i> _{CTX-M-1}	ampicillin, ceftriaxone
<i>bla</i> _{CTX-M-24}	ampicillin, ceftriaxone
<i>bla</i> _{CTX-M-65}	ampicillin, ceftriaxone
<i>bla</i> _{HER}	ampicillin
<i>bla</i> _{HER-1}	ampicillin
<i>bla</i> _{HER-3}	ampicillin
<i>bla</i> _{LAT-1}	amoxicillin-clavulanic acid, ampicillin, cefoxitin, ceftiofur, ceftriaxone
<i>bla</i> _{OXA}	ampicillin
<i>bla</i> _{OXA-1}	ampicillin
<i>bla</i> _{OXA-184}	ampicillin, amoxicillin-clavulanic acid, cefoxitin, ceftriaxone, meropenem

<i>bla</i> _{OXA-193}	ampicillin, amoxicillin-clavulanic acid, cefoxitin, ceftriaxone, meropenem
<i>bla</i> _{OXA-2}	ampicillin
<i>bla</i> _{OXA-449}	ampicillin
<i>bla</i> _{OXA-450}	ampicillin
<i>bla</i> _{OXA-460}	ampicillin
<i>bla</i> _{OXA-461}	ampicillin
<i>bla</i> _{OXA-489}	ampicillin
<i>bla</i> _{OXA-493}	ampicillin
<i>bla</i> _{OXA-61}	ampicillin
<i>bla</i> _{SHV-12}	ampicillin, ceftriaxone
<i>bla</i> _{SHV-2A}	ampicillin, ceftriaxone
<i>bla</i> _{TEM}	ampicillin
<i>bla</i> _{TEM-1}	ampicillin
<i>bla</i> _{TEM-116}	ampicillin
<i>bla</i> _{TEM-135}	ampicillin
<i>catA1</i>	chloramphenicol
<i>catA2</i>	chloramphenicol
<i>catB3</i>	chloramphenicol
<i>cmlA</i>	chloramphenicol

<i>cmlA1</i>	chloramphenicol
<i>cmlA5</i>	chloramphenicol
<i>cmlA6</i>	chloramphenicol
<i>dfr7</i>	trimethoprim-sulfamethoxazole*
<i>dfrA1</i>	trimethoprim-sulfamethoxazole*
<i>dfrA12</i>	trimethoprim-sulfamethoxazole*
<i>dfrA14</i>	trimethoprim-sulfamethoxazole*
<i>dfrA15</i>	trimethoprim-sulfamethoxazole*
<i>dfrA17</i>	trimethoprim-sulfamethoxazole*
<i>dfrA19</i>	trimethoprim-sulfamethoxazole*
<i>dfrA5</i>	trimethoprim-sulfamethoxazole*
<i>dfrB</i>	trimethoprim-sulfamethoxazole*
<i>dfrI</i>	trimethoprim-sulfamethoxazole*
<i>ere(A)</i>	azithromycin, erythromycin
<i>erm(42)</i>	azithromycin, clindamycin, erythromycin
<i>floR</i>	chloramphenicol, florfenicol
<i>lnu(G)</i>	clindamycin
<i>mef(B)</i>	azithromycin, erythromycin
<i>mph(A)</i>	azithromycin, erythromycin
<i>mph(E)</i>	azithromycin, erythromycin
<i>msr(E)</i>	azithromycin, erythromycin
<i>oqxA</i>	ciprofloxacin, nalidixic acid
<i>oqxB</i>	ciprofloxacin, nalidixic acid
<i>qnrA1</i>	ciprofloxacin, nalidixic acid
<i>qnrB</i>	ciprofloxacin, nalidixic acid
<i>qnrB19</i>	ciprofloxacin, nalidixic acid
<i>qnrB2</i>	ciprofloxacin, nalidixic acid
<i>qnrB77</i>	ciprofloxacin, nalidixic acid
<i>qnrS1</i>	ciprofloxacin, nalidixic acid

<i>qnrS2</i>	ciprofloxacin, nalidixic acid
<i>sull</i>	sulfamethoxazole, sulfisoxazole, trimethoprim-sulfamethoxazole*
<i>sulldelta</i>	sulfamethoxazole-sulfisoxazole, trimethoprim-sulfamethoxazole*
<i>sul2</i>	sulfamethoxazole, sulfisoxazole, trimethoprim-sulfamethoxazole*
<i>sul3</i>	sulfamethoxazole, sulfisoxazole, trimethoprim-sulfamethoxazole*
<i>tet</i>	tetracycline
<i>tet(32)</i>	tetracycline
<i>tet(A)</i>	tetracycline
<i>tet(B)</i>	tetracycline
<i>tet(C)</i>	tetracycline
<i>tet(D)</i>	tetracycline
<i>tet(G)</i>	tetracycline
<i>tet(M-W-O-S)</i>	tetracycline
<i>tet(M)</i>	tetracycline
<i>tet(O)</i>	tetracycline
<i>tetA</i>	tetracycline

Table S4: Predicted susceptibility based on acquired resistance.

*trimethoprim-sulfamethoxazole requires both *dfr*-family and *sul* family genes.

Species	drug	mutation ^a	n	# resistant (%)	# sensitive (%)
<i>C. coli</i>	ciprofloxacin	GyrA:T86I	87	87 (100%)	0
<i>C. coli</i>	ciprofloxacin	none observed	207	0	207 (100%)
<i>C. jejuni</i>	ciprofloxacin	GyrA:T86I	85	84 (99%)	1 (1%)
<i>C. jejuni</i>	ciprofloxacin	GyrA:T86K	1	1 (100%)	0
<i>C. jejuni</i>	ciprofloxacin	GyrA:T86V	1	1 (100%)	0
<i>C. jejuni</i>	ciprofloxacin	none observed	389	3 (1%)	386 (99%)
<i>C. coli</i>	nalidixic acid	GyrA:T86I	87	87 (100%)	0
<i>C. coli</i>	nalidixic acid	none observed	207	3 (2%)	204 (98%)
<i>C. jejuni</i>	nalidixic acid	GyrA:T86I	85	83 (98%)	2 (2%)
<i>C. jejuni</i>	nalidixic acid	GyrA:T86K	1	1 (100%)	0
<i>C. jejuni</i>	nalidixic acid	GyrA:T86V	1	1 (100%)	0
<i>C. jejuni</i>	nalidixic acid	none observed	389	3 (1%)	386 (99%)

Table S5: Known fluoroquinolone resistance mutations are highly correlated with fluoroquinolone resistance in *Campylobacter* spp.

^aMutations refer to the position in GyrA (AJW58405.1 for *C. coli*; YP_002344422.1 for *C. jejuni*). “None observed” describes those isolates lacking any previously described fluoroquinolone resistance mutations.

Species	drug	mutation ^a	n	# resistant (%)	# sensitive (%)
<i>C. coli</i>	azithromycin	23S:A2075G	29	29 (100%)	0
<i>C. coli</i>	azithromycin	no mutation	265	0	265 (100%)
<i>C. coli</i>	clindamycin	23S:A2075G	29	29 (100%)	0
<i>C. coli</i>	clindamycin	no mutation	265	17 (6%)	248 (94%)
<i>C. coli</i>	erythromycin	23S:A2075G	29	29 (100%)	0
<i>C. coli</i>	erythromycin	no mutation	265	0	265 (100%)
<i>C. coli</i>	telithromycin	23S:A2075G	29	21/29 (72%)	8/29 (28%)
<i>C. coli</i>	telithromycin	no mutation	265	0	265 (100%)

Table S6: Known macrolide resistance mutations are highly correlated with fluoroquinolone resistance in *C. coli*.

^aMutations refer to the position in *C. coli* 23S (CP011015.1, pos. 39330-42399, VC76_00160). “No mutations” describes those isolates lacking any previously described macrolide resistance mutations.